



Airworthiness Directive

AD No.: 2021-0031

Issued: 22 January 2021

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

LEONARDO S.p.A.

Type/Model designation(s):

A109E helicopters

Effective Date: 05 February 2021

TCDS Number(s): EASA.R.005

Foreign AD: Not applicable

Supersedure: None

ATA 65 – Tail Rotor Drive – Gearbox Assembly – Replacement

Manufacturer(s):

Leonardo S.p.A. Helicopters, formerly Finmeccanica S.p.A., AgustaWestland S.p.A., Agusta S.p.A.

Applicability:

A109E helicopters, all serial numbers up to 11160 inclusive.

Definitions:

For the purpose of this AD, the following definitions apply:

The SB: Leonardo Alert Service Bulletin (SB) 109EP-174.

Affected part: Tail rotor gearbox (TGB) assemblies, having Part Number (P/N) 109-0440-01-115.

Serviceable part: TGB assemblies, having P/N 109-0440-01-119, P/N 109-0440-01-121 or P/N 109-0440-01-123.

Groups: Group 1 helicopters are those that have an affected part installed. Group 2 helicopters are those that do not have an affected part installed.

FH since new: Flight hours (FH) accumulated by an affected part since its first installation on a helicopter.



Reason:

Occurrences were reported of finding affected parts installed on A109E helicopters. Affected parts are not approved for installation on A109E helicopters, and no overhaul/life limits are published in the applicable maintenance manuals.

This condition, if not corrected, could lead to failure of the affected part, possibly resulting in reduced control of the helicopter.

To address this potential unsafe condition, Leonardo published the SB, providing replacement instructions.

For the reasons described above, this AD requires replacement of each affected part with a serviceable part. This AD also prohibits (re)installation of an affected part.

Required Action(s) and Compliance Time(s):

Required as indicated, unless accomplished previously:

Part Replacement:

- (1) For Group 1 helicopters: Within the compliance time as identified in Table 1 of this AD, as applicable, replace the affected part with a serviceable part in accordance with the instructions of the SB.

Table 1 – Compliance Time

FH accumulated by the affected part	Compliance Time
Less than 10 000 FH since new AND less than 3 000 FH since new / last overhaul (whichever occurs later)	Within 50 FH or 6 months, whichever occurs first after the effective date of this AD, not exceeding 3 025 FH since new / last overhaul (whichever occurs later), and not exceeding 10 025 FH since new
10 000 FH or more since new OR 3 000 FH or more since new / last overhaul (whichever occurs later)	Within 25 FH or 3 months, whichever occurs first after the effective date of this AD

Part(s) Installation:

- (2) For Group 1 and Group 2 helicopters: From the effective date of this AD, do not install an affected part on any helicopter.

Ref. Publications:

Leonardo S.p.A. Helicopters SB 109EP-174 original issue dated 20 January 2021.

The use of later approved revisions of the above-mentioned document is acceptable for compliance with the requirements of this AD.



Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the [EU aviation safety reporting system](#). This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.
5. For any question concerning the technical content of the requirements in this AD, please contact: Leonardo S.p.A. Helicopters, Customer Support & Services, Product Support Engineering, E-mail: aw109.mbx.aw@leonardocompany.com.

